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Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicat	ion No.	Applicant(s)	
		10/087,4	10/087,405 KUNZ, ROBERT J.		
Office Action Summary		Examine	r	Art Unit	
		Vincent N	1. Rudolph	2624	
	AILING DATE of this commu	nication appears on th	e cover sheet with the	correspondence address	
THE MAILING  - Extensions of time after SIX (6) MON  - If the period for re  - If NO period for re  - Failure to reply wi Any reply received	ED STATUTORY PERIOD FOR DATE OF THIS COMMUNE of the provision of the provi	IICATION. s of 37 CFR 1.136(a). In no e munication. 30) days, a reply within the sta tatutory penod will apply and v y will, by statute, cause the ap	vent, however, may a reply be ting stutory minimum of thirty (30) day will expire SIX (6) MONTHS from plication to become ABANDONE	nely filed  ys will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133).	,
Status					
2a)⊠ This acti 3)⊡ Since th		2b) ☐ This action is for allowance excep	non-final. t for formal matters, pro	osecution as to the merits is 53 O.G. 213.	
Disposition of Cla	aims				
4a) Of th 5) ☐ Claim(s) 6) ☑ Claim(s) 7) ☑ Claim(s)	1-31 is/are pending in the e above claim(s) is/are allowed. 1-31 is/are rejected. 12, 16 and 25 is/are objection are subject to restri	are withdrawn from co			
Application Pape	rs	·			
10)⊠ The draw Applicant Replacer	cification is objected to by the ving(s) filed on 26 February to may not request that any objected to or declaration is objected to	2002 is/are: a)⊠ acection to the drawing(s) g the correction is requi	be held in abeyance. Se red if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).	
Priority under 35	U.S.C. § 119			·	
12) Acknowle  a) All b  1. Ce  2. Ce  3. Ce  ap	edgment is made of a claim of Some * c) None of: ertified copies of the priority ertified copies of the priority opies of the certified copies oplication from the Internation trached detailed Office action	documents have be documents have be for the priority documents that documents are the priority documents are the priority documents.	en received. en received in Applicat ents have been receiv lle 17.2(a)).	ion No ed in this National Stage	
	person's Patent Drawing Review ( closure Statement(s) (PTO-1449 o		4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:		

Art Unit: 2624

#### **DETAILED ACTION**

## Claim Objections

Claims 12, 16 and 25 objected to because of the following informalities:

Regarding claim 12, the dependent claim is referring to a method, but the independent claim is an imaging device.

Regarding claim 16, the dependent claim is referring to a computer-readable medium, but the independent claim is a method.

Regarding claim 25, the dependent claim is claiming "the application", but the independent claim of claim 13, claims an order processing utility.

Appropriate correction is required.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 5-17, 24-28 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Mathiesen (Pub. # 20030135381).

Regarding claim 9, Mathiesen (Pub. # 20030135381) discloses an imaging device (See Figure 1, Element 140 and 142) that inherently includes a memory for distributing the metrics information corresponding to the imaging operations (in order for

Art Unit: 2624

the remote monitoring server, See Figure 1, Element 150, to obtain the metrics information, such as the status of the printers, See Page 2, Paragraph 0016) as well as inherently including a processor so that it is able to execute instructions from the operatively coupled memory (such as the page count and ink level so the remote monitoring server is able to receive it, See Page 2, Paragraph 0016). The imaging device receives a command to perform an imaging operation (the computer system, See Figure 1, Element 120, submits the job to the server computer, See Figure 1, Element 130, which then transfers the files to the printer, See Page 1-2, Paragraph 0015) and then performs the print job (once the printer receives the files from server computer, See Page 1-2, Paragraph 0015). Once the imaging operation is completed, the metrics information is communicated to a second device (remote monitoring server, See Figure 1, Element 150) for access by an application on a third device (a separate device that is able to process either the billing, See Page 2, Paragraph 0017, or the replacement ordering, See Page 2, Paragraph 0021), which accesses the metrics information without forwarding any request to the first device (the remote monitoring server forwards the information to the application, See Page 2, Paragraph 0017 and 0021).

Regarding claim 10, Mathiesen (Pub. # 20030135381) discloses the metrics information comprises page count and print media type information (the number of print media units printed and ink levels of each cartridge, See Page 2, Paragraph 0016).

Regarding claim 11, Mathiesen (Pub. # 20030135381) discloses the metrics information is not directly solicited from the first device by the third device (since the

Art Unit: 2624

second device, the remote monitoring server, provides the information to the third device, the third device does not request this information, See Page 2, Paragraph 0017 and 0021).

Regarding claim 12, Mathiesen (Pub. # 20030135381) discloses the metrics information includes toner utilization information (the toner level in each toner cartridge, See Page 2, Paragraph 0016).

Regarding claims 5-8, the rationale provided in the rejection of claims 9-12 is incorporated herein. In addition, the imaging device of claims 9-12 corresponds to the computer-readable medium of claims 5-8 and performs the steps disclosed.

Regarding claim 13, Mathiesen (Pub. # 20030135381) discloses a method for providing real-time imaging metrics information (the remote monitoring server, See Figure 1, Element 150, obtains the metrics information of the printer, See Page 2, Paragraph 0016). This includes a server device (remote monitoring server, See Figure 1, Element 150) receiving the metrics information corresponding to an imaging operation performed by the imaging device (the server receives, or monitors, the status of the printer, such as the ink level, See Page 2, Paragraph 0016). Once the imaging metrics is received, the server automatically communicates a portion of the imaging metrics to an order processing utility (if the ink level is getting low, the server communicates the data to see if a replacement cartridge through the order processing utility is needed, See page 2, Paragraph 0021).

Regarding claim 14, Mathiesen (Pub. # 20030135381) discloses the imaging device is a printer (See Figure 1, Element 140 and 142; Page 1, Paragraph 0013).

Art Unit: 2624

Regarding claim 16, Mathiesen (Pub. # 20030135381) discloses the imaging metrics includes toner utilization information (ink level of each cartridge, See Page 2, Paragraph 0016) and the order processing utility reorders toner based on the imaging metrics (if it is determined the ink cartridge needs replaced, an order is automatically placed, See Page 2, Paragraph 0021).

Regarding claim 17, Mathiesen (Pub. # 20030135381) discloses a method for providing real-time imaging metrics information (the remote monitoring server, See Figure 1, Element 150, obtains the metrics information of the printer, See Page 2, Paragraph 0016). This includes a server device (remote monitoring server, See Figure 1, Element 150) receiving the metrics information corresponding to an imaging operation performed by the imaging device (the server receives, or monitors, the status of the printer, such as the ink level, See Page 2, Paragraph 0016). Once the imaging metrics is received, the server automatically communicates a portion of the imaging metrics to a billing utility (in order to charge a user's account for the amount printed, See Page 2, Paragraph 0017).

Regarding claim 15, Mathiesen (Pub. # 20030135381) discloses the imaging metrics includes page count (the number of sheets printed, See Page 2, Paragraph 0017) and the billing utility determines the client billing based on the imaging metrics (the remote monitoring server tracks every print job printed so that the end user's account is charged that amount and stored there, See Page 2, Paragraph 0017).

Regarding claim 24, Mathiesen (Pub. # 20030135381) discloses the communication to the order processing utility is performed without communicating with

Art Unit: 2624

the imaging device (once the remote monitoring server receives the metrics information from the imaging device, See Page 2, Paragraph 0016, there no need to communicate with it again in order to communicate with the order processing utility, See Page 2, Paragraph 0021).

Regarding claim 25, Mathiesen (Pub. # 20030135381) discloses the communication to the order processing utility is done without it polling or querying the server device (the remote monitoring server initiates communication with the order processing utility so that a replacement is able to be ordered, See Page 2, Paragraph 0021).

Regarding claim 26, Mathiesen (Pub. # 20030135381) discloses the imaging metrics are received periodically (it monitors the contents in each printer on a regular basis, See Page 2, Paragraph 0016) and automatically communicates to the order processing utility whenever the imaging metrics is updated (it automatically communicates whenever the server receives the updated imaging metrics and detects the ink is low, See Page 2, Paragraph 0021).

Regarding claim 27, Mathiesen (Pub. # 20030135381) does not disclose that the order processing utility is located at a place other than the imaging device and the server device, but it is inherent that it would be located separate from the remote processing server, such as on the vendor's device, so that the server is able to place an order and have it shipped to the end user (See Page 2, Paragraph 0021).

Regarding claim 28, Mathiesen (Pub. # 20030135381) discloses the application can be either a billing utility of an order processing utility (the application is on a

Art Unit: 2624

separate device that is able to process either the billing, See Page 2, Paragraph 0017, or the replacement ordering, See Page 2, Paragraph 0021).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 19-23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mathiesen (Pub. # 20030135381) in view of Garr ('420).

Regarding claim 1, Mathiesen (Pub. # 20030135381) discloses a method for distributing peripheral device operational metrics information (obtaining the content information of the printer, See Page 2, Paragraph 0016). This includes receiving a command to perform an imaging operation (the computer system, See Figure 1, Element 120, submits the job to the server computer, See Figure 1, Element 130, which then transfers the files to the printer, See Page 1-2, Paragraph 0015) and then performs the print job (once the printer receives the files from server computer, See Page 1-2, Paragraph 0015). Once the imaging operation is completed, the metrics information is communicated to a second device (remote monitoring server, See Figure 1, Element 150) and then forwarded to a third device without communicating with the first device (forwarding the information to a device that includes either order processing, See Page 2, Paragraph 0021 or a billing account, See Page 2, Paragraph 0017, without

Art Unit: 2624

communicating with a first device since the remote monitoring server provides the communication).

Mathiesen (Pub. # 20030135381) does not disclose the second device receiving a request from a third device to access the metrics information.

Garr ('420) discloses a third device (host computer) that requests to access the metrics information (tracks the toner gradation changes and total pages printed from the printer, See Col. 17, Line 63-Col. 18, Line 4, so a user is able to view it, See Figure 7).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have a host computer as a third device, such as the one disclosed by Garr ('420) and incorporate it into the distributed computing environment of Mathiesen (Pub. # 20030135381) because by having a host computer view the metrics information, a user is able to request and view the combined metrics information used on multiple printers (See Mathiesen (Pub. # 20030135381), Figure 1) from the server instead of accessing a single printer to access the metrics information.

Regarding claim 19, Mathiesen (Pub. # 20030135381) discloses a computer-readable medium for providing real time imaging metrics information (it is inherent that a remote processing server, See Figure 1, Element 150, includes a computer-readable medium so that the server is able to store the metrics information, See Page 2, Paragraph 0016). This includes a server device (remote monitoring server, See Figure 1, Element 150) receiving the imaging operational metrics information corresponding to an imaging operation performed by the imaging device (the server receives, or monitors, the status of the printer, such as the ink level, See Page 2, Paragraph 0016).

Art Unit: 2624

Once the imaging metrics is received, the server automatically communicates a portion of the imaging operational metrics to an application program that executes on another device that is different from the imaging and server device (if the ink level is getting low, the server communicates the data to an order processing, which inherently runs on a different device, such as on the vendor's device, so that the server is able to place an order and have it shipped to the end user if a replacement cartridge is needed, See page 2, Paragraph 0021).

Mathiesen (Pub. # 20030135381) does not disclose the server receiving a request from an application program for a portion of the imaging operational metrics.

Garr ('420) discloses an application program (See Figure 7) on a host computer that requests to access the metrics information so a user is able to view it (tracks the toner gradation changes and total pages printed from the printer, See Col. 17, Line 63-Col. 18, Line 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have an application on a host computer, such as the one disclosed by Garr ('420) and incorporate it into the computer-readable medium of Mathiesen (Pub. # 20030135381) because by having a host computer view the metrics information, a user is able to request and view the combined metrics information used on multiple printers (See Mathiesen (Pub. # 20030135381), Figure 1) from the server instead of accessing a single printer to access the metrics information.

Regarding claims 2-4 and 20-21, the rationale provided in the rejection of claims 10-12 is incorporated herein. In addition, the imaging device of claims 10-12

Art Unit: 2624

corresponds to the method of claims 2-4, and the imaging device of claims 10 and 12 corresponds to the computer-readable medium of claims 20-21 and performs the steps disclosed.

Regarding claim 22, Mathiesen (Pub. # 20030135381) discloses a server (remote monitoring server, See Figure 1, Element 150) that inherently includes a memory for providing real-time imaging metrics information (in order for the remote monitoring server, to obtain and store the metrics information, such as the status of the printers, See Page 2, Paragraph 0016) as well as inherently including a processor so that it is able to execute instructions from the operatively coupled memory (such as the page count and ink level, See Page 2, Paragraph 0016). This includes a server device (remote monitoring server, See Figure 1, Element 150) receiving an unsolicited set of imaging operational metrics information corresponding to an imaging operation performed by the imaging device (the server receives, or monitors, the status of the printer, such as the ink level, See Page 2, Paragraph 0016). Once the imaging metrics is received, the server automatically communicates a portion of the imaging operational metrics to an application program that executes on another device that is different from the imaging and server device (if the ink level is getting low, the server communicates the data to an order processing, which inherently runs on a different device, such as on the vendor's device, so that the server is able to place an order and have it shipped to the end user if a replacement cartridge is needed, See page 2, Paragraph 0021).

Mathiesen (Pub. # 20030135381) does not disclose the server receiving a request from an application program for a portion of the imaging operational metrics.

Art Unit: 2624

Garr ('420) discloses an application program (See Figure 7) on a host computer that requests to access the metrics information so a user is able to view it (tracks the toner gradation changes and total pages printed from the printer, See Col. 17, Line 63-Col. 18, Line 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have an application on a host computer, such as the one disclosed by Garr ('420) and incorporate it into the computer-readable medium of Mathiesen (Pub. # 20030135381) because by having a host computer view the metrics information, a user is able to request and view the combined metrics information used on multiple printers (See Mathiesen (Pub. # 20030135381), Figure 1) from the server instead of accessing a single printer to access the metrics information.

Regarding claim 23, Mathiesen (Pub. # 20030135381) discloses the second device (remote monitoring server, See Figure 1, Element 150) provides access for the metrics information to the third device when the first device (printer, See Figure 1, Element 140 and 142) communicates updated metrics information to the second device (provides information to a device that includes either order processing, See Page 2, Paragraph 0021 or a billing account, See Page 2, Paragraph 0017, whenever the server obtains updated content information from the printer, See Page 2, Paragraph 0016).

Mathiesen (Pub. # 20030135381) does not disclose the second device receiving a registration request from a third device to automatically receive the metrics information whenever it is updated.

Art Unit: 2624

Garr ('420) discloses a third device (host computer) that requests to access the metrics information (tracks the toner gradation changes and total pages printed from the printer, See Col. 17, Line 63-Col. 18, Line 4) so a user is able to view it on a job-by-job basis (See Figure 7; Col. 18, Line 18-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have a host computer as a third device, such as the one disclosed by Garr ('420) and incorporate it into the distributed computing environment of Mathiesen (Pub. # 20030135381) because by having a host computer automatically view the metrics information, a user is able to request and view the updated and combined metrics information used on multiple printers (See Mathiesen (Pub. # 20030135381), Figure 1) from the server instead of accessing a single printer to access the metrics information.

Regarding claim 29, the rationale provided in the rejection of claim 25 is incorporated herein. In addition, the method of claim 25 corresponds to the computer-readable medium of claim 29 and provides the steps herein.

Claims 18 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mathiesen (Pub. # 20030135381) in view of Garr ('420) as applied to claims 13, 17 and 22, and further in view of Stone and Mathworks.com.

Regarding claim 18, Mathiesen (Pub. # 20030135381) discloses configuring the server device (remote processing server, See Figure 1, Element 150) to automatically communicate a portion of the imaging device operational metrics to the order processing utility (if the ink level is getting low, the server communicates the data to see

Art Unit: 2624

if a replacement cartridge through the order processing utility is needed, See page 2, Paragraph 0021).

Mathiesen (Pub. # 20030135381) does not disclose receiving a registration request from the order processing utility.

Polling is defined as a way to make continuous requests for data from another device. Another way to have the requested information is by a real-time interrupt, which is defined as a signal informing the program an event has happened. This can temporarily stop a program until the interrupt is complete. The theory of polling and interrupt have been taught since the 1983 book Microcomputer Interfacing by Harold S. Stone, and each has its own advantages. According to Mathworks.com, polling for a program, in this instance, is better because it can execute the request at the required sample time rather than in a given base sample time and overload the system.

It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have the theory of polling incorporated into the method of Mathiesen (Pub. # 20030135381) since polling for a program, in this instance, is better because it can execute the request at the required sample time rather than in a given base sample time and overload the system.

Regarding claim 30, Mathiesen (Pub. # 20030135381) discloses the communication to the application program is done without it polling or querying the server device (the remote monitoring server initiates communication with the order processing utility so that a replacement is able to be ordered, See Page 2, Paragraph 0021).

Art Unit: 2624

Mathiesen (Pub. # 20030135381) does not disclose receiving a registration request from the application program.

Polling is defined as a way to make continuous requests for data from another device. Another way to have the requested information is by a real-time interrupt, which is defined as a signal informing the program an event has happened. This can temporarily stop a program until the interrupt is complete. The theory of polling and interrupt have been taught since the 1983 book Microcomputer Interfacing by Harold S. Stone, and each has its own advantages. According to Mathworks.com, polling for a program, in this instance, is better because it can execute the request at the required sample time rather than in a given base sample time and overload the system.

It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have the theory of polling incorporated into the server of Mathiesen (Pub. # 20030135381) since polling for a program, in this instance, is better because it can execute the request at the required sample time rather than in a given base sample time and overload the system.

Regarding claim 31, Mathiesen (Pub. # 20030135381) discloses configuring the server device (remote monitoring server, See Figure 1, Element 150) to automatically communicate a portion of the imaging device operational metrics to a billing utility (the server communicates with a user's account to charge the end user for the units of media printed, See Page 2, Paragraph 0017).

Mathiesen (Pub. # 20030135381) does not disclose receiving a registration request from the billing utility.

Art Unit: 2624

Polling is defined as a way to make continuous requests for data from another device. Another way to have the requested information is by a real-time interrupt, which is defined as a signal informing the program an event has happened. This can temporarily stop a program until the interrupt is complete. The theory of polling and interrupt have been taught since the 1983 book Microcomputer Interfacing by Harold S. Stone, and each has its own advantages. According to Mathworks.com, polling for a program, in this instance, is better because it can execute the request at the required sample time rather than in a given base sample time and overload the system.

It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have the theory of polling incorporated into the method of Mathiesen (Pub. # 20030135381) since polling for a program, in this instance, is better because it can execute the request at the required sample time rather than in a given base sample time and overload the system.

#### Response to Arguments

Applicant argues that the Garr ('420) reference does not disclose a second device receiving a request from a third device without communicating with the first device. While Garr ('420) does not disclose this limitation, incorporating it into the prior art of Mathiesen (Pub. # 20030135381) meets the limitation. For example, Mathiesen (Pub. # 20030135381) discloses multiple printers the user is able to select from as well as a remote monitoring server that obtains the content information from the printers. By incorporating Garr ('420) into Mathiesen (Pub. # 20030135381), a user is able to

Art Unit: 2624

request the metrics information from the server and view it in order see how many total toner and paper was used for the combined printers.

In addition, Mathiesen (Pub. # 20030135381) also discloses an order processing utility (in order to determine if a replacement cartridge is needed and proceed if it is, See Page 2, Paragraph 0021) as well as a billing utility (to an end user's account, See Page 2, Paragraph 0017).

In light of the Mathiesen (Pub. # 20030135381) prior art, the rejection is able to overcome the amended claims, as well as the ones incorporating Garr ('420) and Stone and Mathworks.com.

Based on these facts, this action is made final.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is: Motamed ('359), Tani ('Pub. # 20020059106) and Samuels ('225).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent M. Rudolph whose telephone number is (571) 272-8243. The examiner can normally be reached on Monday through Friday 8 A.M. - 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VMR 311106

Vincent M. Rudolph Examiner Art Unit 2624

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